

**The Knowledge Bank at The Ohio State University**  
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Section BB

SPECIFICATIONS  
ALL MACHINERY  
TO BE

**TIMKEN BEARING  
EQUIPPED**

APPROVED BY *Industry*

## Approved By Industry

America is sweeping aside obsolete methods and machines.

Machine buyers and builders have found a modern symbol of protection for production, freedom from friction, extended machine life, preserved alignment, reduced maintenance costs... they have found it in "Timken Bearing Equipped."

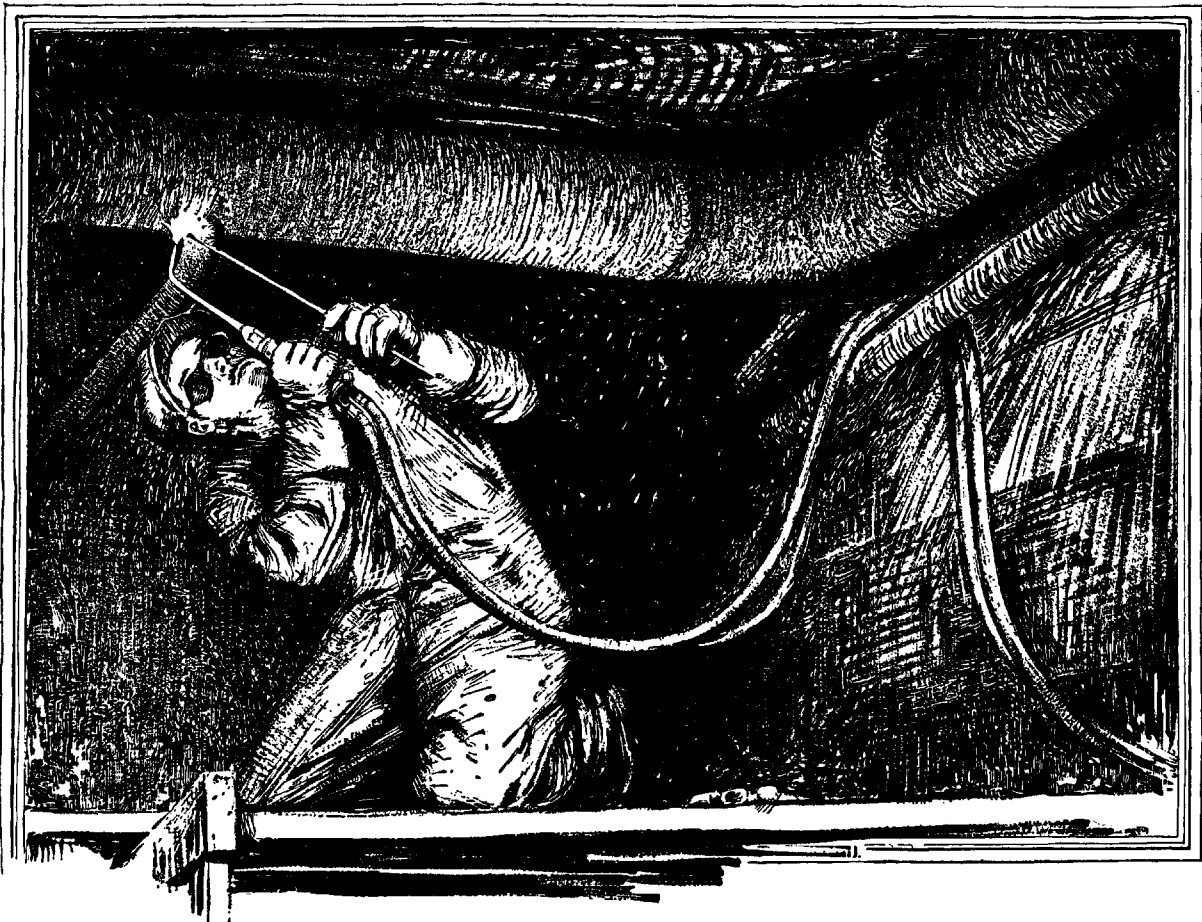
To all industry it means that all loads, whether all radial, all thrust or a combination of both, are capably carried by Timken.

Years of proof have brought recognition to this exclusive combination: Timken tapered construction, Timken *POSITIVELY ALIGNED ROLLS* and Timken-made steel, and in the years to come, you who are student engineers to-day, will find it an indispensable aid in a continued national program of modernization.

Thus "Timken Bearing Equipped" will sweep on as industry's stamp of approval in the drive on wear and waste.

THE TIMKEN ROLLER BEARING CO., CANTON, OHIO

# TIMKEN *Tapered Roller* BEARINGS



## OXWELDED INDUSTRIAL PIPING

**P**RODUCTION in industrial plants and in the process industries is dependent to a marked degree upon satisfactory piping. In most instances the type of joint used in a piping system is a determining factor in operating efficiency.

The oxy-acetylene welded joint has been proved by innumerable tests and by thousands of practical installations. It has many advantages—simplification of design and construction, economy of installation, permanent tightness, ease of insulating and dependability under the most severe operating conditions. These are of outstanding importance for high and low pressure steam lines, refrigeration piping, gas, water, compressed air and all other types of piping installations.

A properly made oxy-acetylene weld is an integral part of the pipe itself. It has the same characteristics of strength and ductility. It is 100 per cent. efficient.

From time to time the oxy-acetylene industry is in the market for technically trained men. It offers splendid opportunities for advancement.

### A. G. DESCH

Notre Dame—1923  
Football—1 year  
Track—3 years  
Captain—1923  
Olympic Team—1920

### A. R. O'NEAL

Boston College—1926  
Football—3 years  
Baseball—3 years  
Hockey—2 years  
Officer Student Council

One of a series of advertisements featuring College men serving this industry.

The Linde Air Products Company—The Prest-O-Lite Company, Inc.—Oxweld Acetylene Company—Union Carbide Sales Company—Manufacturers of supplies and equipment for oxy-acetylene welding and cutting.

UNITS OF

## UNION CARBIDE AND CARBON CORPORATION

30 East 42nd Street



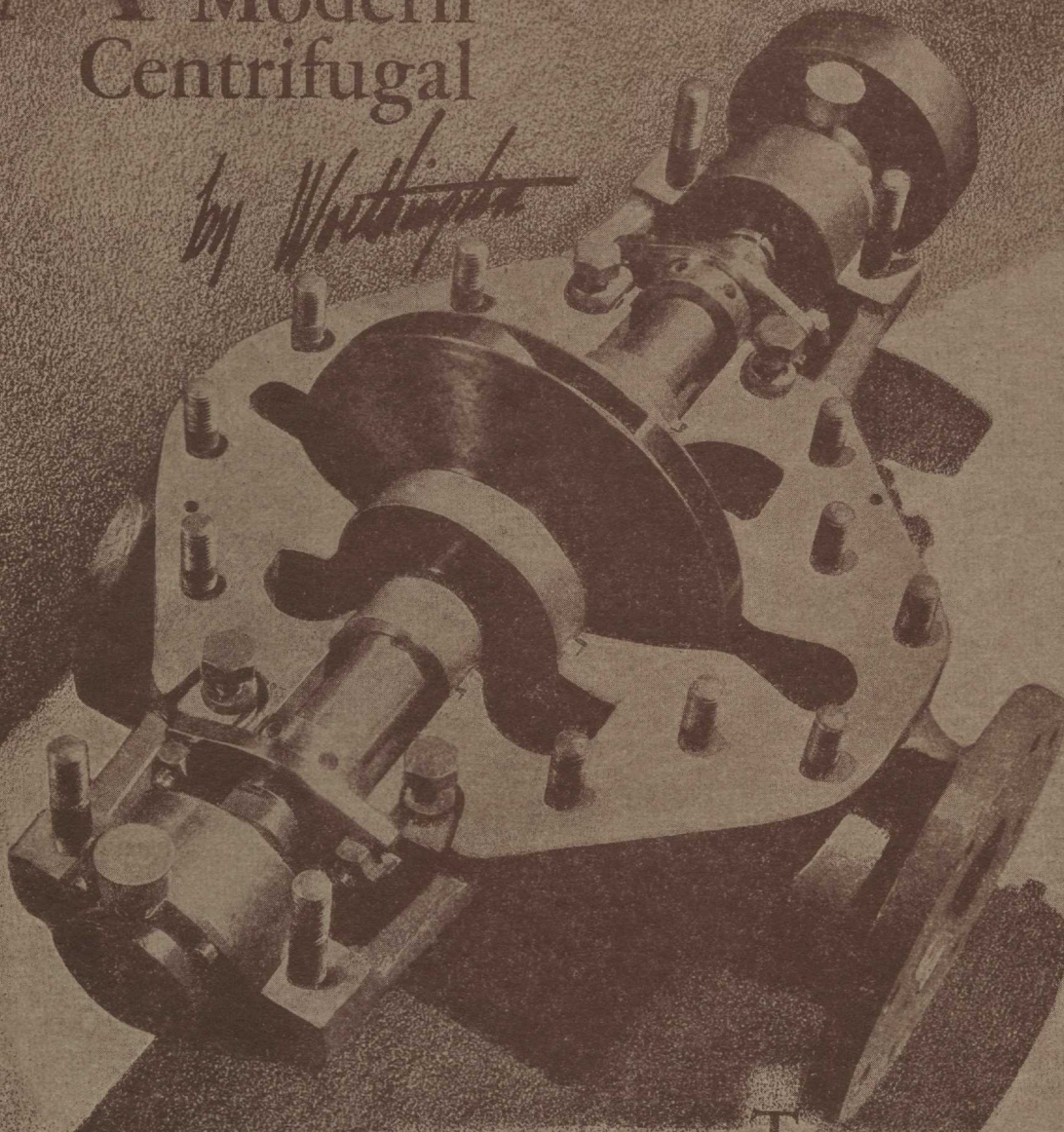
New York, N. Y.

FEBRUARY, 1930



# A Modern Centrifugal

*by Worthington*



THE use of ball bearings in centrifugal pumps is a basic improvement around which Worthington has evolved other features of advanced design.

Shorter shaft span possible with ball bearings results in stiffer shaft.  
Boring of bearing brackets and casing at one setting assures accurate alignment.  
Close clearance of ball bearings produces smooth operation at all speeds.  
These mechanical advantages, combined with improved hydraulic design, result in higher efficiency and lower maintenance cost . . . hence lower expenditure in the long run.

Bulletin W-310-B1A describes Worthington Ball Bearing Pumps in detail.

*May we send you a copy?*

## WORTHINGTON PUMP AND MACHINERY CORPORATION

Works: Harrison, N. J. Cincinnati, Ohio Buffalo, N. Y. Holyoke, Mass.

Executive Offices: 2 Park Avenue, New York, N. Y.

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*District Sales Offices:*

ATLANTA	CHICAGO	DALLAS	EL PASO	LOS ANGELES	PHILADELPHIA	ST. PAUL	SEATTLE
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## WORTHINGTON

### PUMPS

COMPRESSORS  
*Stationary and Portable*

CONDENSERS  
and Auxiliaries

DIESEL ENGINES

GAS ENGINES

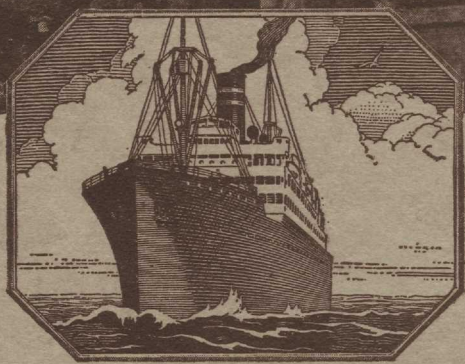
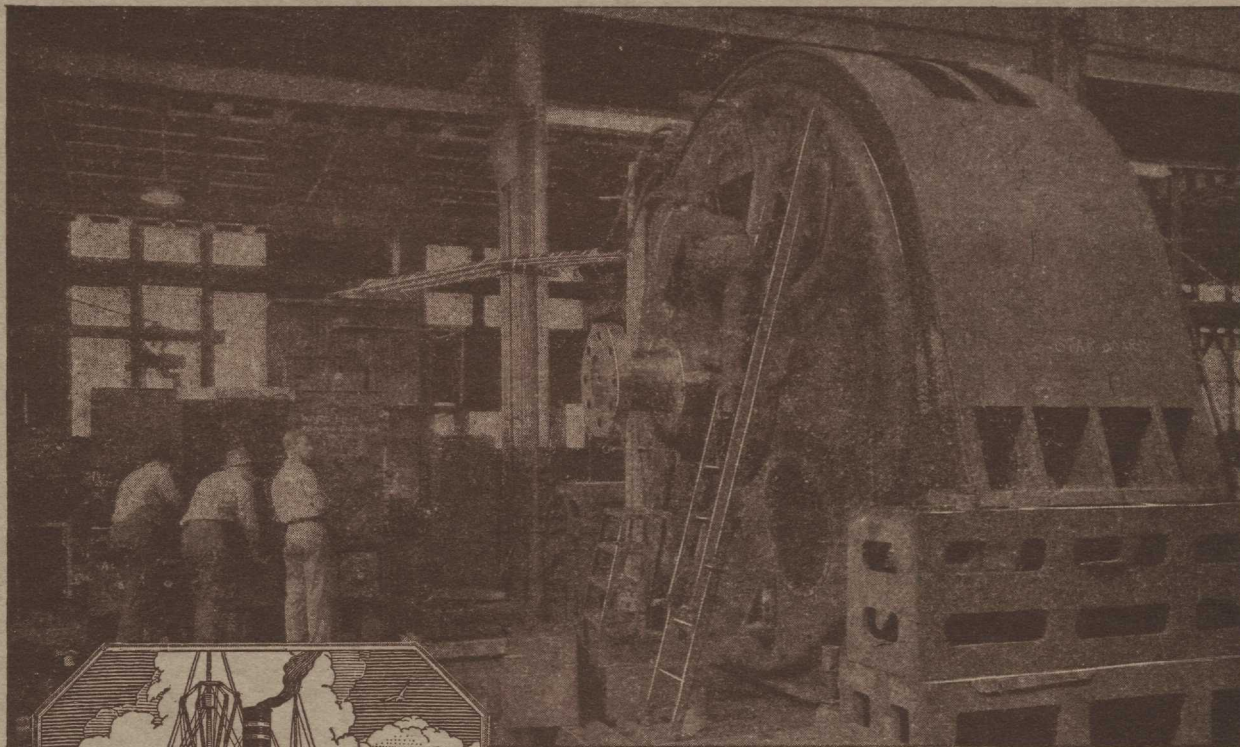
FEEDWATER HEATERS

WATER, OIL and  
GASOLINE METERS

*Divisions of Ingersoll*

# WORTHINGTON





## A Trial Trip on Test

**G**ENERAL ELECTRIC is constructing and testing four synchronous marine motors and other electric equipment for the two new \$5,500,000 Ward liners to Cuba.

Long before the maiden voyage, an earlier voyage, in effect, takes place in the G-E plant, where each motor is subjected to tests approximating and often exceeding actual service conditions that may be met on the seas.

Experienced as well as recruit Test men carefully note the responses of the big synchronous motors to saturation, synchronous impedance, core losses, phase characteristics, heat runs, static impedance, voltage wave forms, and high-potential tests.

The testing of synchronous marine motors is but one of the aspects of the electrical industry in which college-trained men who come to General Electric every year are engaged.

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ELECTRIC HOUR, BROADCAST  
EVERY SATURDAY AT 9 P.M.,  
E.S.T. ON A NATION-WIDE  
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# GENERAL ELECTRIC



GENERAL ELECTRIC COMPANY, SCHENECTADY, NEW YORK

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